FCC ID : 2APN5T2T3US

RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency(RF) Radiation as specified in §1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density(mW/cm^2)	Average Time
(A) Limits for Occupational/Control Exposures				
300-1500	**--**	**--**	**F/300**	**6**
1500-100000	**--**	**--**	**5**	**6**
(B) Limits for General Population/Uncontrol Exposures				
300-1500	**--**	**--**	**F/1500**	**6**
1500-100000	**--**	**--**	**1**	**30**

11.1 Friis transmission formula: Pd= (Pout*G)\ ($4*pi*R^2$)

Where

Pd= Power density in mW/cm^2

Pout=output power to antenna in mW

G= Numeric gain of the antenna relative to isotropic antenna

Pi=3.1416

R= distance between observation point and center of the radiator in 20cm

Pd the limit of MPE, $1mW/cm^2$. If we know the maximum gain of the nd total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

11.2 Measurement Result

Channel Freq. (MHz)	modulation	conducted power (mW)	conducted power (dBm)	Tune-up power (dBm)	Max tune-up power (dBm)	Antenna Gain Numeric	Evaluation result (mW/cm2)	Power density Limits (mW/cm2)
2.412	11b	15.00	11.76	10dBm to 12dBm	12	1.26	0.00397	<1
2.437	11b	14.45	11.60	10dBm to 12dBm	12	1.26	0.00397	<1
2.462	11b	12.33	10.91	10dBm to 12dBm	12	1.26	0.00397	<1
2.412	11g	28.38	14.53	14dBm to 16dBm	16	1.26	0.00998	<1
2.437	11g	35.73	15.53	14dBm to 16dBm	16	1.26	0.00998	<1
2.462	11g	21.98	13.42	12dBm to 14dBm	14	1.26	0.00630	<1
2.412	11n HT20	27.10	14.33	14dBm to 16dBm	16	1.26	0.00998	<1
2.437	11n HT20	33.11	15.20	14dBm to 16dBm	16	1.26	0.00998	<1
2.462	11n HT20	20.80	13.18	12dBm to 14dBm	14	1.26	0.00630	<1